CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Light Brown Apple Moth
"Claims and Responses"

CLAIM: There's been *"no demonstrated damage by the apple moth. This is the green age but they're still doing things in the old toxic way."* (Dona Spring, Berkeley City Councilmember, *The Daily Californian*, 2/25/08)

RESPONSE:

- **The Light Brown Apple Moth (LBAM) treatment with moth pheromone is the most environmentally friendly pest eradication program in the history of the California Department of Food and Agriculture (CDFA).** Moth pheromone treatment is progressive and dramatically different from treatments with conventional pesticides.
- **The pheromone doesn't kill or even hurt the moth.** Instead, it creates mating confusion and disruption, which prevents moths from multiplying and results in the population dying out naturally.
- **If not eradicated, LBAM can cause damage to the environment and the food supply like it does in Australia, where it is native, and in New Zealand, where it has been for more than 100 years.** In California, damage to date has been minimal because the pest was detected early, before significant damage occurred.
- **The pheromone eradication technique was designed by a Technical Working Group (TWG) of international scientific experts.** The TWG believes the moth is a serious environmental and agricultural threat to California. (Source: APHIS/USDA)

CLAIM**:** No one *"outside the state of California has said the [aerial] spraying is safe."* (Jane Brunner, Oakland City Councilmember, *Tri-Valley Herald,* 2/25/08)

RESPONSE:

- **Aerial treatments with moth pheromones have been ongoing around the world for more than a decade.**
- **Illinois, Indiana, Ohio, Virginia and Wisconsin have sprayed the pheromone in residential areas.** (Source: USDA)
- **More than 3 million acres in the U.S. have been treated aerially with moth pheromone for mating disruption of the gypsy moth.** All of these treatments, like that in California, have been with a product consisting of moth pheromone formulated with other ingredients.
- **There is no indication that these treatments have harmed people, pets or plants.** (For more information see page 14 of the USDA's February 2008 environmental assessment)

CLAIM**:** Aerial spraying *"doesn't work*." Instead CDFA should be using *"ground treatments"* and a *"natural enemy, like a non-stinging wasp."* (Jared Blumenthal, Director of San Francisco's Department of the Environment, *San Diego Union Tribune*,2/13/08)

RESPONSE:

- **CDFA and the U.S. Department of Agriculture (USDA) are already utilizing ground treatments as part of the varied approach suggested by the TWG.** Ground treatments with pheromone-infused twist ties are occurring in isolated areas with small infestations.
- **Other ground-based approaches, such as the release of stingless parasitic wasps, are anticipated.**
- **Aerial pheromone treatment should be the approach for heavy infestations spread over large geographic areas, according to the TWG report.** (Source: APHIS/USDA)

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CLAIM**:** Aerial spraying should be stopped until a *"reliable outside independent source verifies that there are no health effects."* (Oakland City Council resolution, *Bay City News*, 3/6/08)

RESPONSE:

- **The USDA is working with New Zealand agricultural officials.** Together, they are testing aerial pheromone products for use in 2008.
- **A complete battery of scientific tests is being conducted at the request of the federal and state EPAs and by a private laboratory in Texas.** These tests, known as the "six-pack," are for oral toxicity, dermal toxicity, skin irritation, inhalation toxicity, eye irritation and dermal sensitization.
- **Before any spraying occurs, the U.S. EPA, the state Office of Environmental Health Hazard Assessment (OEHHA), Department of Public Health (DPH) and the state Department of Pesticide Regulation (DPR) all must review the test results to accept the treatment as low-toxicity.**

CLAIM*: The CDFA is spraying for "political reasons"* and *"demonstrates a full out press to keep [the] USDA from slapping a quarantine on [California]."*
(Steven Scholl-Buckwald, Pesticide Action Network, *ABC7News.com*, 2/13/08)

RESPONSE:

- **We must eradicate LBAM to prevent significant environmental and economic damage to California.**
- **The pest threatens more than 2,000 plants and more than 250 crops.**
- **If it is not eradicated, a statewide quarantine would be established.** In order to meet the quarantine requirements, California food producers could face delays and increased costs, which could trickle down to consumers. The impacts could be felt from restaurants, to grocery stores, to farmers' markets.
- **The USDA estimates that, should the pest become established statewide, it could cause billions of dollars worth of economic damage.** (For more information, see page 19 of the USDA's February 2008 environmental assessment)

CLAIM: LBAM can't be that devastating to thousands of species of plants, otherwise *"both Australia and New Zealand would be very barren countries, plantwise, and that isn't the case."*
(Richard Fagerlund, *San Francisco Chronicle*, 2/23/08)

RESPONSE:

- **Natural predators in Australia keep LBAM manageable there**, along with other pest-control practices.
- **New Zealand has imported natural predators from Australia for LBAM.**
- **Those natural predators don't exist in California**, according to California's Primary State Entomologist, Dr. Kevin Hoffman. There is no guarantee that natural predators will evolve in California, which, in any case, has a goal of eradication rather than pest control. (Source: CDFA)

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CLAIM**:** After the 2007 aerial sprayings in Santa Cruz and Monterey counties, over *"600 reports of health problems emerged."* (Traci Sheehan, Planning and Conservation League, *California Progress Report*, 3/7/08)

RESPONSE:

- **OEHHA, DPR and DPH are reviewing the claims of illness.** They will have a conclusive report completed by early April 2008.
- **It is unlikely the pheromone was used at exposure levels that would be expected to result in health effects.** Previously, a consensus statement by OEHHA and DPR, in consultation with DPH, concluded that there was an extremely low application rate of the pheromone product used last year – about a teaspoon per acre. (Source: Consensus Statement)

CLAIM*: The classification of LBAM "as an actionable quarantine pest*" is based on outdated classifications by the United States Department of Agriculture (USDA) and *"should be reviewed and revised based on current, relevant, science-based information."*
(Integrated Pest Management Practices for the Light Brown Apple Moth in New Zealand: Implications for California, Report, 3/6/08)

RESPONSE:

- **A USDA review in 2003 determined that LBAM is "considered highly likely of becoming established in the U.S.; the consequences of its establishment for U.S. agricultural and natural ecosystems were judged to be high." This is current and relevant science.** (Source: USDA "Mini Risk Assessment," September 2003)

CLAIM: The spray contains ingredients that are highly toxic to aquatic species. As well as surfactants, that might have contributed to algae bloom (red tide) and the death of hundreds of waterfowl. (A flyer at: http://www.lbamspray.com/00_Flyers/MarinFlyer.pdf)

RESPONSE:

- **A UC Davis study that found the Checkmate pheromone product used last year was not harmful to marine life.** The study was completed in fall 2007, at the request of the Monterey Bay National Marine Sanctuary. (Source: Marine Life Study)
- **A California Department of Fish and Game (DFG) study showed no traces of Checkmate in dead waterfowl found last year in the central coast area.** That study was completed in March 2008. (Source: Fish and Game Study)

CLAIM: CDFA's aerial program *"doesn't smell right. If the problems are out there, why are they just spraying (the urban areas)?"* (Jane Brunner, Oakland City Councilmember Source: *Tri-Valley Herald*, 2/25/08)

RESPONSE:

- **CDFA is treating infested areas.**
- **Most CDFA eradication programs, historically, have been in urban areas due to higher population concentrations and a propensity for people to bring invasive species into metropolitan areas.**
- **Urban areas are common locations for invasive species introductions.**